Appendix C:
Volume Analysis Methodology

A. Introduction

This appendix outlines the methodology applied to determine the normal and peak transaction volumes and number of virtual users required to support the test via the TTG. The purpose of the volume-related test cycles is to evaluate BellSouth's ability to process a representative set of near-future wholesale transaction volumes in support of competitive local service providers. The scope of each test cycle is defined in the applicable section of the test plan body.

B. Assumptions

The following assumptions are among those that will be used in development of this volume analysis:

- The volumes to be tested are expected transactions as of year end, 2001 (YE01)

- The volumes to be tested will be representative of the entire BST nine state territory.

- Transaction volumes will be disaggregated by pre-ordering, ordering and M&R business processes, and by resale and UNE product categories in order to generate a representative volume test and address the requirements of the Georgia Order.

- A representative sample of functional test scenarios, increased to reflect forecasted regional transaction, will be the basis for volume testing.

C. Volume Basis

The following types of projection will be considered in developing test volumes:
- Trend projections based on current volumes and activities
- Estimated market share loss and market composition at the target date
- Forecast of CLEC and BellSouth retail volumes

The following data sources will be considered in developing test volumes:
- Goldman Sachs Telecom Services Report on CLECs: 1999 Issues and Outlook, January 1999

- Yankee Group CLEC 101: Lessons in Competition, October 1998
- Federal Communications Commission Industry Analysis Division, Report on Local Competition, December 1998
- CLEC forecasts
- BellSouth forecasts

D. Transaction Types

Transactions will be distributed between the resale and UNE product categories as well as error and non-error categories based on the projected ratio at YE01.

Transactions will be distributed at the scenario level based on the current ratio of scenario types as defined in Appendix A equivalency classes. Test scenarios will be selected for testing at volumes based on estimates of functionally equivalent transaction classes.

Transactions will be distributed by process based on the current ratio of process execution.

Appendix D1:
Evaluation Criteria

This appendix outlines the evaluation criteria to be applied during the various test cycles.

Once the results from each test cycle have been collected, they must be assessed in order to determine performance. This activity includes comparing expected results files with actual results. In addition, this activity involves assessing the coverage and accuracy of all test conditions within a test cycle. Those failing validation must be re-tested during the next cycle. If a significant number of test conditions fail or are not covered during a specific cycle, the test cycle will be rescheduled for execution following the implementation of the appropriate corrective measures.

Both transactional testing and operational analysis require evaluation criteria to assess test results. Test evaluation criteria provides the basis for determining whether an individual test event meets stated objectives and achieves expected results. This activity serves to sharpen the test approach and scope by defining the specific criteria required to measure the success of each test event.

Evaluation criteria are defined for each test to determine whether the results deviate from expectations. In those cases where results deviate, analysis is undertaken to determine the significance of the deviation.

The following table contains metrics that will be gathered from transactional testing and operational analysis. The BellSouth Service Quality Measurements Regional Performance Reports contain BellSouth performance measurement data which will be utilized during the test. This document is available from the BellSouth Web site.

For those areas lacking an existing performance measurement approved by the Georgia PSC, KPMG has developed a set of process and function evaluation criteria that will be used to evaluate the functional and transactional elements of BellSouth's OSS interfaces and processes. During test design, KPMG will further develop the appropriate metrics and standards of performance. These evaluation criteria and may be applied to all instances of a test execution or to a sampling of instances. The volume tests are an example of where a sampling of test transactions would be appropriate to ensure the integrity and content of the transaction data while testing the capacity of BellSouth's application software and infrastructure.

Business Process	Metric	Test Objective	Test Technique	
Pre-Ordering	OSS Response Interval	Performance	Transaction Processing Performance Comparison	
	OSS Interface Availability	Interface	Transaction Processing Document Review	
	OSS Functionality	Functionality	Transaction Processing	

Business Process	Metric	Test Objective	Test Technique	
	Capacity of Systems	Volume & Capacity Management	Transaction Processing Inspection Document Review	
	Completeness of Documents	Documentation	Document Review	
	Accuracy of Documents	Documentation	Document Review	
Ordering	Percent Flow-through Service Requests	Performance	Transaction Processing Performance Comparison	
	Percent Rejected Service Requests	Performance	Transaction Processing	
	Reject Interval	Performance	Transaction Processing	
	Firm Order Confirmation Timeliness	Performance	Transaction Processing	
	OSS Interface Availability	Interface	Transaction Processing Observation Document Review	
	OSS Functionality	Functionality	Transaction Processing	
	Capacity of Systems	Volume & Capacity Management	Transaction Processing Inspection Document Review	
	Completeness of Documents	Documentation	Document Review	
	Accuracy of Documents	Documentation	Document Review	
Provisioning	Average Completion Interval & Order Completion Interval Distribution	Performance	Transaction Processing Inspection Performance Comparison	
	Held Order Interval Distribution & Mean Interval	Performance	Transaction Processing Performance Comparison	
	Average Jeopardy Notice Interval	Performance	Transaction Processing Performance Comparison	
	Percentage of Orders Given Jeopardy Notices	Performance	Transaction Processing Performance Comparison	
	Percent Missed Installation Appointments	Performance	Transaction Processing Performance Comparison	
	Percent Provisioning Troubles within 30 Days	Performance	Transaction Processing Performance Comparison	
	Coordinated Customer Conversions	Performance	Transaction Processing Inspection	
	Average Completion Notice Interval	Performance	Transaction Processing Performance Comparison	
	Completed Service Order Accuracy	Performance	Transaction Processing Performance Comparison	

Business Process	Metric	Test Objective	Test Technique	
	OSS Functionality	Functionality	Transaction Processing	O&P-1,2
	Completeness of Documents	Documentation	Document Review	
	Accuracy of Documents	Documentation	Document Review	
Maintenance & Repair	OSS Interface Availability	Interface	Transaction Processing Document Review Observation	
	Average OSS Response Interval	Performance	Transaction Processing Performance Comparison	
	Missed Repair Appointments	Performance	Transaction Processing Performance Comparison Inspection	
	Customer Trouble Report Rate	Performance	Performance Comparison Inspection Interviews	
	Maintenance Average Duration	Performance	Transaction Processing Performance Comparison Inspection	
	Percent Repeat Troubles within 30 Days	Performance	Transaction Processing Performance Comparison Inspection	
	Out of Service > 24 Hours	Performance	Transaction Processing Performance Comparison Inspection	
	OSS Functionality	Functionality	Transaction Processing	
	Capacity of Systems	Volume & Capacity Management	Transaction Processing Inspection Document Review	
	Completeness of Documents	Documentation	Document Review	
	Accuracy of Documents	Documentation	Document Review	
Billing	Invoice Accuracy & Timeliness	Performance	Transaction Processing	
	Usage Data Delivery Accuracy	Performance	Transaction Processing	
	Usage Data Delivery Timeliness and Completeness	Performance	Transaction Processing	
	Completeness of Documents	Documentation	Document Review	
	Accuracy of Documents	Documentation	Document Review	
Change Management	Change Development Process	Documentation	Document Review Inspection	
	Change Evaluation Process	Documentation	Document Review Inspection	

Business Process	Metric	Test Objective	Test Technique	
	Change Implementation Process	Documentation	Document Review Inspection	
	Change Interval	Documentation	Document Review Inspection	
	Documentation Update Timeliness	Documentation	Document Review Inspection	
	Adequacy and Completeness of Change Management Tracking Process	Documentation	Document Review Inspection	

The following table contains the specific criteria that will be used for each test.

EVALUATION MEASURES		
Category	Measure	Description
	Availability of Interface	The interface is accessible during specified hours of availability as described in BellSouth CLEC documentation including CLEC notification letters. System outages or downtimes are within service quality measurements.
	Presence of Functionality	The functionality exists in the application or OSS and transactions can be executed through the interface as described in BellSouth CLEC documentation and training.
	Accuracy of Response	The data contained in the response (valid response or error response) is accurate and complete in relationship to the event or test case and as described in BellSouth CLEC documentation.
	Timeliness of Response	The response is generated and delivered within objective intervals.
	Clarity of Information	The data contained in the response provides a clear understanding of the requested data, error or status of a transaction.
	Availability of Document(s)	The BellSouth CLEC documentation and training is readily available. Documents are available in electronic or hard copy format.
	Accuracy of Document(s)	The BellSouth CLEC documentation accurately describes the process, application, interface, business rules, technical requirements, etc. that are relevant to a CLEC entering the local service market. Documentation is accurate and consistent within the document as well as across BellSouth CLEC documents.
	Structure of Document(s)	The BellSouth CLEC documentation clearly states the scope and intended audience for the document. The document contains change management markings for version/release control and associated dates. The document contains contact information for reporting errors, obtaining additional information or related resources.
	Distribution of Document(s)	The BellSouth CLEC documentation is readily available via various distribution paths (BST web site, training classes, restricted web sites, on request, via functional SMEs, industry groups, etc.).

	Change Management Notification Process	Changes to the BellSouth CLEC documentation are communicated to the CLEC community in a timely and non-discriminatory manner via various distribution paths.
	Adequacy and Completeness of Planning and Forecasting	There are clearly defined and documented processes for reviewing and projecting growth in facilities requirements.
	Adequacy and Completeness of Usage Monitoring	There are clearly defined and documented processes for recording and analyzing system usage.
	Adequacy and Completeness of Capacity Management	There are clearly defined and documented processes for developing and implementing capacity management plans.
	Provisioning Validation	The circuits are provisioned correctly at CLEC co-location facilities. Dial tone is available.
	Process Validation	The steps or processes required for reviewing, balancing or evaluating follow standard business practices and/or documented procedures. The work flow steps required to complete the process (i.e., invoice balancing) are defined. The intervals or time lines defined in the process are reasonable.
	Provisioning Coordination	Provisioning and maintenance activities for Unbundled Network Elements (UNEs) are coordinated between BellSouth, CLECs and end-user customers.
	Provisioning Timeliness of Response/Completion	Provisioning completion/activity notification is required. Confirmation of activity is processed back to BellSouth and CLEC points of contact within objective intervals.
	Provisioning Systems Integrity	Systems utilized in provisioning and coordination of CLEC activities are consistent and comparable with BST retail systems.
Result Types	Satisfied	The evaluation criterion was satisfied.
	Satisfied, with Qualifications	The evaluation criterion was satisfied , however, specific areas might need improvement.
	Not Satisfied	The evaluation criterion was not satisfied. Some issues were identified that would have a business impact to CLECs – in some cases an exception was raised.
	Satisfied, Exception Resolved	The evaluation criterion was not initially satisfied, an Exception was raised, BellSouth changes were made, and the criterion was subsequently satisfied.

IV. Pre-Ordering Test Section

1.0 PRE-1: TAG Pre-Ordering Functional Test

The TAG Pre-Ordering Functional Test will evaluate the functional elements of the pre-ordering process for UNEs as delivered to CLECs by the TAG interface. The TAG interface will be used to execute the following pre-order transaction types:

Pre-Order Transaction Type	TAG Functional Evaluation	Product Category
Validate Address	X	Product Independent
Retrieve CSR	X	Product Independent
Determine Product/Service Availability	X	Product Independent
Request Available Telephone Number(s)	X	Product Independent
Reserve Telephone Number(s)	X	Product Independent
Cancel Telephone Number(s) Reservation	X	Product Independent
Determine Appointment Availability	X	Product Independent
Calculate Due Date	X	Product Independent

The following evaluation criteria () will be used to address the sub-processes and functions evaluated in test PRE-1.

Sub Process	Function	Evaluation Criteria	Test Cross Reference
Validate Address	Create address validation request transaction	Accuracy of Document(s) Availability of Documentation	PRE-1-1-1
	Send address request using BTN	Presence of Functionality	PRE-1-1-2
	Send address validation request using WTN	Presence of Functionality	PRE-1-1-3
	Send address validation request using partial address	Presence of Functionality	PRE-1-1-4
	Receive match response	Accuracy of Response Clarity of Information Timeliness of Response	PRE-1-1-5
	Receive near match response	Accuracy of Response Clarity of Information Timeliness of Response	PRE-1-1-6
	Receive no match response	Accuracy of Response Clarity of Information Timeliness of Response	PRE-1-1-7
	Receive error response	Accuracy of Response Clarity of Information Timeliness of Response	PRE-1-1-8
	Correct errors	Clarity of Information Availability of Documentation Accuracy of Document(s)	PRE-1-1-9
	Re-send address inquiry	Presence of Functionality	PRE-1-1-10

Sub Process	Function	Evaluation Criteria	Test Cross Reference
	Receive match response	Accuracy of Response Clarity of Information Timeliness of Response	PRE-1-1-11
Retrieve CSR	Create CSR request transaction	Accuracy of Document(s) Availability of Documentation	PRE-1-2-1
	Send CSR request using BTN	Presence of Functionality	PRE-1-2-2
	Send CSR request using WTN	Presence of Functionality	PRE-1-2-3
	Send CSR request using circuit identifier and state code	Presence of Functionality	PRE-1-2-4
	Send CSR request using miscellaneous account number	Presence of Functionality	PRE-1-2-5
	Send request for directory information only	Presence of Functionality	PRE-1-2-6
	Receive match response	Accuracy of Response Clarity of Information Timeliness of Response	PRE-1-2-7
	Receive no match response	Accuracy of Response Clarity of Information Timeliness of Response	PRE-1-2-8
	Receive error response	Accuracy of Response Clarity of Information Timeliness of Response	PRE-1-2-9
	Correct errors	Clarity of Information Availability of Documentation Accuracy of Document(s)	PRE-1-2-10
	Re-send CSR inquiry	Presence of Functionality	PRE-1-2-11
	Receive match response	Accuracy of Response Clarity of Information Timeliness of Response	PRE-1-2-12
Determine Product / Service Availability	Create service availability request transaction	Accuracy of Document(s) Availability of Documentation	PRE-1-3-1
	Send service availability (LPIC, PIC, Switch Service Availability) request transaction	Presence of Functionality	PRE-1-3-2
	Receive availability response	Accuracy of Response Clarity of Information Timeliness of Response	PRE-1-3-3
	Receive error response	Accuracy of Response Clarity of Information Timeliness of Response	PRE-1-3-4
	Correct errors	Clarity of Information Availability of Documentation Accuracy of Document(s)	PRE-1-3-5
	Re-send service availability inquiry	Presence of Functionality	PRE-1-3-6
	Receive availability response	Accuracy of Response Clarity of Information Timeliness of Response	PRE-1-3-7

Sub Process	Function	Evaluation Criteria	Test Cross Reference
Request Available Telephone Number(s)	Create available telephone number request transaction	Accuracy of Document(s) Availability of Documentation	PRE-1-4-1
	Send TN request for specific number(s) (Easy, Sequential, Ascending, Vanity, etc)	Presence of Functionality	PRE-1-4-2
	Send TN request for random number(s)	Presence of Functionality	PRE-1-4-3
	Send TN request for a range of specific numbers	Presence of Functionality	PRE-1-4-4
	Send TN request for a range of random numbers	Presence of Functionality	PRE-1-4-5
	Receive available numbers response	Accuracy of Response Clarity of Information Timeliness of Response	PRE-1-4-6
	Receive error response	Accuracy of Response Clarity of Information Timeliness of Response	PRE-1-4-7
	Correct errors	Clarity of Information Availability of Documentation Accuracy of Document(s)	PRE-1-4-8
	Re-send available telephone number request	Presence of Functionality	PRE-1-4-9
	Receive available numbers response	Accuracy of Response Clarity of Information Timeliness of Response	PRE-1-4-10
Reserve TN(s)	Create telephone number reservation transaction	Accuracy of Document (s) Availability of Documentation	PRE-1-5-1
	Send reservation request for a single TN	Presence of Functionality	PRE-1-5-2
	Send reservation request for Multi-line Hunt	Presence of Functionality	PRE-1-5-3
	Send reservation request for Direct-In-Dial	Presence of Functionality	PRE-1-5-4
	Send reservation extension request	Presence of Functionality	PRE-1-5-5
	Receive confirmation response	Accuracy of Response Clarity of Information Timeliness of Response	PRE-1-5-6
	Receive error response	Accuracy of Response Clarity of Information Timeliness of Response	PRE-1-5-7
	Correct errors	Clarity of Information Availability of Documentation Accuracy of Document(s)	PRE-1-5-8
	Re-send TN reservation request	Presence of Functionality	PRE-1-5-9
	Receive confirmation response	Accuracy of Response Clarity of Information Timeliness of Response	PRE-1-5-10
Cancel TN Reservation	Create telephone number reservation cancellation transaction	Accuracy of Document(s) Availability of Documentation	PRE-1-6-1
	Send cancel reservation request for a single TN	Presence of Functionality	PRE-1-6-2

Sub Process	Function	Evaluation Criteria	Test Cross Reference
	Send cancel reservation request for Multi-line Hunt	Presence of Functionality	PRE-1-6-3
	Send cancel reservation request for Direct-In-Dial	Presence of Functionality	PRE-1-6-4
	Receive confirmation response	Accuracy of Response Clarity of Information Timeliness of Response	PRE-1-6-5
	Receive error response	Accuracy of Response Clarity of Information Timeliness of Response	PRE-1-6-6
	Correct errors	Clarity of Information Availability of Documentation Accuracy of Document(s)	PRE-1-6-7
	Re-send cancel TN reservation request	Presence of Functionality	PRE-1-6-8
	Receive confirmation response	Accuracy of Response Clarity of Information Timeliness of Response	PRE-1-6-9
Determine Appointment Availability	Create appointment availability request transaction	Presence of Functionality Accuracy of Document(s) Availability of Documentation	PRE-1-7-1
	Send request for appointment availability	Presence of Functionality	PRE-1-7-2
	Receive valid response	Accuracy of Response Clarity of Information Timeliness of Response	PRE-1-7-3
	Receive error response	Accuracy of Response Clarity of Information Timeliness of Response	PRE-1-7-4
	Correct errors	Presence of Functionality Clarity of Information Availability of Documentation Accuracy of Document(s)	PRE-1-7-5
	Re-send available due date request	Presence of Functionality	PRE-1-7-6
	Receive valid response	Accuracy of Response Clarity of Information Timeliness of Response	PRE-1-7-7
Calculate Due Date	Create due date calculation request transaction	Accuracy of Document(s) Availability of Documentation	PRE-1-8-1
	Send request for due date calculation	Presence of Functionality	PRE-1-8-1
	Receive valid response	Accuracy of Response Clarity of Information Timeliness of Response	PRE-1-8-2
	Receive error response	Accuracy of Response Clarity of Information Timeliness of Response	PRE-1-8-3

Sub Process	Function	Evaluation Criteria	Test Cross Reference
	Correct errors	Clarity of Information Availability of Documentation Accuracy of Document(s)	PRE-1-8-4
	Re-send due date calculation request	Presence of Functionality	PRE-1-8-5
	Receive valid response	Accuracy of Response Clarity of Information Timeliness of Response	PRE-1-8-6
Pre-order/Order Integration	Submit pre-order transactions designated for integration test	Presence of Functionality	PRE-1-9-1
	Receive valid response	Accuracy of Response Clarity of Information Timeliness of Response	PRE-1-9-2
	Receive error response	Accuracy of Response Clarity of Information Timeliness of Response	PRE-1-9-3
	Correct error(s)	Clarity of Information Availability of Documentation Accuracy of Document(s)	PRE-1-9-4
	Re-send transaction	Presence of Functionality	PRE-1-9-5
	Receive valid response	Accuracy of Response Clarity of Information Timeliness of Response	PRE-1-9-6

2.0   PRE-2: Pre-Ordering Performance Results Comparison

The Pre-Ordering Performance Results Comparison is a comparative analysis of performance results collected by KPMG test management tools and those collected by BellSouth's OSS performance measurement system. The source results collected from PRE-1: TAG Functional Test, PRE-4: TAG Normal Volume Performance Test, and PRE-5: TAG Peak Volume Performance Test will be compared to BellSouth's performance measurements, accuracy and trends will be identified, and disparities will be analyzed for significance. The following evaluation criteria will be used to address the sub-processes and functions evaluated in test PRE-2.

Sub Process	Function	Evaluation Criteria	Test Cross Reference
Average OSS Response Interval	Address Validation	Availability of Interface Accuracy of Response Timeliness of Response	PRE-2-1-1
	CSR Retrieval	Availability of Interface Accuracy of Response Timeliness of Response	PRE-2-1-2
	Switched Service Availability	Availability of Interface Accuracy of Response Timeliness of Response	PRE-2-1-3
	PIC/LPIC Availability	Availability of Interface Accuracy of Response Timeliness of Response	PRE-2-1-4
	Product / Service Availability	Availability of Interface Accuracy of Response Timeliness of Response	PRE-2-1-5
	Telephone Number(s) Availability	Availability of Interface Accuracy of Response Timeliness of Response	PRE-2-1-6
	Reserve TN(s)	Availability of Interface Accuracy of Response Timeliness of Response	PRE-2-1-7
	Cancel TN Reservation	Availability of Interface Accuracy of Response Timeliness of Response	PRE-2-1-8
	Determine Due Date / Appointment Availability	Availability of Interface Accuracy of Response Timeliness of Response	PRE-2-1-9

3.0 PRE-3: TAG Pre-Ordering Documentation Evaluation

The TAG Pre-Ordering Documentation Evaluation is an analysis of the BellSouth provided documentation used by CLECs to interface and interact with the TAG interface for pre-ordering activities. This evaluation is intended to review the availability, accuracy and completeness of BellSouth's pre-ordering documentation using a variety of operational analysis techniques. The following evaluation criteria will be used to address the sub-processes and functions evaluated in test PRE-3.

Sub Process	Function	Evaluation Criteria	Test Cross Reference
Pre-Ordering Documentation	LEO Implementation Guides (Pre-Ordering Sections of Volumes 1-4)	Availability of Document(s) Accuracy of Document(s) Structure of Document(s) Distribution of Document(s) Clarity of Information Change Management Notification Process	PRE-3-1-1
	Facilities Based & Resale - CLEC Starter Kit (Pre-Ordering sections)	Availability of Document(s) Accuracy of Document(s) Structure of Document(s) Distribution of Document(s) Clarity of Information Change Management Notification Process	PRE-3-1-2
	Facilities Based & Resale CLEC Activation Requirements	Availability of Document(s) Accuracy of Document(s) Structure of Document(s) Distribution of Document(s) Clarity of Information Change Management Notification Process	PRE-3-1-3
	TAG Technical and Programmer Reference Guide(s)	Availability of Document(s) Accuracy of Document(s) Structure of Document(s) Distribution of Document(s) Clarity of Information Change Management Notification Process	PRE-3-1-4

Sub Process	Function	Evaluation Criteria	Test Cross Reference
	Carrier Notification	Availability of Document(s) Accuracy of Document(s) Structure of Document(s) Distribution of Document(s) Clarity of Information Change Management Notification Process	PRE-3-1-5

4.0 PRE-4: TAG Normal Volume Performance

The TAG Normal Volume Performance Test will evaluate the behavior and performance of the TAG pre-order interface under "normal" YE01 projected transaction load conditions. This test cycle will be executed by submitting large volumes of flow-through pre-ordering (TAG only) resale and UNE service request test cases in a manner consistent with the forecasted daily usage patterns and transaction mix (including error conditions). Patterns of time within the day and patterns of days within the month will be emulated. The TAG interface will be used to execute the following pre-order transaction types:

Pre-Order Transaction Type	TAG Normal Volume	TAG Peak Volume	Product Category
Validate Address	X		UNE, Resale
Retrieve CSR	X		UNE, Resale
Determine Product/Service Availability	X		UNE, Resale
Request Available Telephone Number(s)	X		UNE, Resale
Reserve Telephone Number(s)	X		UNE, Resale
Cancel Telephone Number(s) Reservation	X		UNE, Resale
Determine Appointment Availability	X		UNE, Resale
Calculate Due Date	X		UNE, Resale

The following evaluation criteria will be used to address the sub-processes and functions evaluated in test PRE-4.

Sub Process	Function	Evaluation Criteria	Test Cross Reference
Submit pre-orders in Projected Normal Volumes	Address Validation	Availability of Interface Accuracy of Response Timeliness of Response	PRE-4-1-1
	CSR Retrieval	Availability of Interface Accuracy of Response Timeliness of Response	PRE-4-1-2
	Switched Service Availability	Availability of Interface Accuracy of Response Timeliness of Response	PRE-4-1-3
	PIC/LPIC Availability	Availability of Interface Accuracy of Response Timeliness of Response	PRE-4-1-4
	Product / Service Availability	Availability of Interface Accuracy of Response Timeliness of Response	PRE-4-1-5
	Telephone Number(s) Availability	Availability of Interface Accuracy of Response Timeliness of Response	PRE-4-1-6
	Reserve TN(s)	Availability of Interface Accuracy of Response Timeliness of Response	PRE-4-1-7
	Cancel TN Reservation	Availability of Interface Accuracy of Response Timeliness of Response	PRE-4-1-8

Sub Process	Function	Evaluation Criteria	Test Cross Reference
	Determine Due Date / Appointment Availability	Availability of Interface Accuracy of Response Timeliness of Response	PRE-4-1-9

5.0   PRE-5: TAG Peak Volume Performance

The TAG Normal Volume Performance Test will evaluate the behavior and performance of the TAG pre-order interface under "peak" YE01 projected transaction load conditions. This test cycle will be executed by submitting large volumes of flow-through pre-ordering (TAG only) resale and UNE service request test cases in a manner consistent with the forecasted daily usage patterns and transaction mix (including error conditions). Patterns of time within the day and patterns of days within the month will be emulated. The TAG interface will be used to execute the following pre-order transaction types:

Pre-Order Transaction Type	TAG Normal Volume	TAG Peak Volume	Product Category
Validate Address		X	UNE, Resale
Retrieve CSR		X	UNE, Resale
Determine Product/Service Availability		X	UNE, Resale
Request Available Telephone Number(s)		X	UNE, Resale
Reserve Telephone Number(s)		X	UNE, Resale
Cancel Telephone Number(s) Reservation		X	UNE, Resale
Determine Appointment Availability		X	UNE, Resale
Calculate Due Date		X	UNE, Resale

The following evaluation criteria (will be used to address the sub-processes and functions evaluated in test PRE-5.

Sub Process	Function	Evaluation Criteria	Test Cross Reference
Submit pre-orders in Projected Peak Volumes	Address Validation	Availability of Interface Accuracy of Response Timeliness of Response	PRE-5-1-1
	CSR Retrieval	Availability of Interface Accuracy of Response Timeliness of Response	PRE-5-1-2
	Switched Service Availability	Availability of Interface Accuracy of Response Timeliness of Response	PRE-5-1-3
	PIC/LPIC Availability	Availability of Interface Accuracy of Response Timeliness of Response	PRE-5-1-4
	Product / Service Availability	Availability of Interface Accuracy of Response Timeliness of Response	PRE-5-1-5
	Telephone Number(s) Availability	Availability of Interface Accuracy of Response Timeliness of Response	PRE-5-1-6
	Reserve TN(s)	Availability of Interface Accuracy of Response Timeliness of Response	PRE-5-1-7

Sub Process	Function	Evaluation Criteria	Test Cross Reference
	Cancel TN Reservation	Availability of Interface Accuracy of Response Timeliness of Response	PRE-5-1-8
	Determine Due Date / Appointment Availability	Availability of Interface Accuracy of Response Timeliness of Response	PRE-5-1-9

6.0   PRE-6: Pre-Order Processing Systems Capacity Management Evaluation

The Pre-Order Processing Systems Capacity Management Evaluation is a detailed review of the safeguards and procedures in place to plan for and manage projected growth in the use of the cluster of pre-ordering applications. The following evaluation criteria will be used to address the sub-processes and functions evaluated in test PRE-6.

Sub Process	Function	Evaluation Criteria	Test Cross Reference
~~TAG~~ Pre-Order Capacity Management	Data collection and reporting of business volumes, resource utilization, and performance monitoring~~Evaluate business volume tracking and forecasting~~	Adequacy and Completeness of ~~Planning and Forecasting~~ data collection and reporting	PRE-6-1-1
	Data verification and analysis of business volumes, resource utilization, and performance monitoring~~Evaluate resource usage tracking and forecasting~~	Adequacy and Completeness of ~~Usage Monitoring~~ data verification and analysis	PRE-6-1-2
	Systems and capacity planning.~~Evaluate performance management process~~	Adequacy and Completeness of ~~Performance Management Process~~ systems and capacity planning	PRE-6-1-3
	~~Evaluate capacity management process~~	~~Adequacy and Completeness of Capacity Management~~	~~PRE-6-1-4~~

V. Ordering and Provisioning Test Section

1.0   O&P-1: EDI Functional Test

The EDI Functional Test will evaluate the functional elements of the ordering and provisioning process for UNEs as delivered to CLECs by the EDI interface. This test cycle will be executed by submitting local service requests (LSRs) for UNEs against BellSouth test bed accounts and allowing the process to continue through the return of either a firm order confirmation (FOC) or reject/error notice. A number of these transactions will be permitted to proceed through the physical provisioning process and the return of an electronic completion notice (CN). The following evaluation criteria will be used to address the sub-processes and functions evaluated in test O&P-1.

Sub Process	Function	Evaluation Criteria	Test Cross Reference
Submit an Order	Create order transaction(s)	Accuracy of Document(s) Availability of Documentation	O&P-1-1-1
	Send order in LSR format	Presence of Functionality	O&P-1-1-2
	Receive acknowledgment	Accuracy of Response Clarity of Information Timeliness of Response	O&P-1-1-3
	Receive FOC/error/reject notification	Accuracy of Response Clarity of Information Timeliness of Response	O&P-1-1-4
	Send Expedited Order Transaction	Presence of Functionality	O&P-1-1-5
Submit an Error	Create error transaction(s)	Accuracy of Document(s) Availability of Documentation	O&P-1-2-1
	Send error in LSR format	Presence of Functionality	O&P-1-2-2
	Receive acknowledgment	Accuracy of Response Clarity of Information Timeliness of Response	O&P-1-2-3
	Receive planned error/reject notification	Accuracy of Response Clarity of Information Timeliness of Response	O&P-1-2-4
	Correct errors	Clarity of Information Availability of Documentation Accuracy of Document(s)	O&P-1-2-5
	Re-send order	Presence of Functionality	O&P-1-2-6
	Receive FOC	Accuracy of Response Clarity of Information Timeliness of Response	O&P-1-2-7
Supplement an Order	Create Supplement transaction(s)	Accuracy of Document(s) Availability of Documentation	O&P-1-3-1
	Send supplement	Presence of Functionality	O&P-1-3-2

Sub Process	Function	Evaluation Criteria	Test Cross Reference
	Receive acknowledgment	Accuracy of Response Clarity of Information Timeliness of Response	O&P-1-3-3
	Receive FOC/error/reject notification	Accuracy of Response Clarity of Information Timeliness of Response	O&P-1-3-4
	Correct errors	Clarity of Information Availability of Documentation Accuracy of Document(s)	O&P-1-3-5
	Re-send supplement	Presence of Functionality	O&P-1-3-6
	Receive FOC	Accuracy of Response Clarity of Information Timeliness of Response	O&P-1-3-8
Pre-Order/Order Integration	Populate integration orders with information returned from designated pre-order response	Clarity of Information	O&P-1-4-1
	Submit integration orders	Presence of Functionality	O&P-1-4-2
	Receive acknowledgement	Accuracy of Response Clarity of Information Timeliness of Response	O&P-1-4-3
	Receive error/reject notification	Accuracy of Response Clarity of Information Timeliness of Response	O&P-1-4-4
	Correct error(s)	Clarity of Information Availability of Documentation Accuracy of Document(s)	O&P-1-4-5
	Re-send integration order	Presence of Functionality	O&P-1-4-6
	Receive FOC	Accuracy of Response Clarity of Information Timeliness of Response	O&P-1-4-7
Receive Completion Notice (CN)	Receive CN transaction	Accuracy of Response Clarity of Information Timeliness of Response	O&P-1-5-1
Receive Jeopardy Notification	Receive Jeopardy Notification transaction	Accuracy of Response Clarity of Information Timeliness of Response	O&P-1-6-1
Check Service Order Status	Check Service Order Status	Accuracy of Response Clarity of Information Timeliness of Response	O&P-1-7-1

2.0   O&P-2: TAG Functional Test

The TAG Functional Test will evaluate the functional elements of the ordering and provisioning process for UNEs as delivered to CLECs via the TAG interface. This test cycle will be executed by submitting LSRs for UNEs against BellSouth test bed accounts and allowing the process to continue through the return of either an FOC or reject/error notice. A number of these transactions will be permitted to proceed through the physical provisioning process and return an electronic CN. The following evaluation criteria will be used to address the sub-processes and functions evaluated in test O&P-2.

Sub Process	Function	Evaluation Criteria	Test Cross Reference
Submit an Order	Create order transaction(s)	Accuracy of Document(s) Availability of Documentation	O&P-2-1-1
	Send order in LSR format	Presence of Functionality	O&P-2-1-2
	Receive acknowledgment	Accuracy of Response Clarity of Information Timeliness of Response	O&P-2-1-3
	Receive FOC/error/reject notification	Accuracy of Response Clarity of Information Timeliness of Response	O&P-2-1-4
	Send Expedited Order Transaction	Presence of Functionality	O&P-2-1-5
Submit an Error	Create error transaction(s)	Accuracy of Document(s) Availability of Documentation	O&P-2-2-1
	Send error in LSR format	Presence of Functionality	O&P-2-2-2
	Receive acknowledgment	Accuracy of Response Clarity of Information Timeliness of Response	O&P-2-2-3
	Receive planned error/reject notification	Accuracy of Response Clarity of Information Timeliness of Response	O&P-2-2-4
	Correct errors	Clarity of Information Availability of Documentation Accuracy of Document(s)	O&P-2-2-5
	Re-send order	Presence of Functionality	O&P-2-2-6
	Receive FOC	Accuracy of Response Clarity of Information Timeliness of Response	O&P-2-2-7
Supplement an Order	Create supplement transaction(s)	Accuracy of Document(s) Availability of Documentation	O&P-2-3-1
	Send supplement	Presence of Functionality	O&P-2-3-2

Sub Process	Function	Evaluation Criteria	Test Cross Reference
	Receive acknowledgment	Accuracy of Response Clarity of Information Timeliness of Response	O&P-2-3-3
	Receive FOC/error/reject notification	Accuracy of Response Clarity of Information Timeliness of Response	O&P-2-3-4
	Correct errors	Clarity of Information Availability of Documentation Accuracy of Document(s)	O&P-2-3-5
	Re-send supplement	Presence of Functionality	O&P-2-3-6
	Receive FOC	Accuracy of Response Clarity of Information Timeliness of Response	O&P-2-3-7
Pre-Order/Order Integration	Populate integration orders with information returned from designated pre-order response	Clarity of Information	O&P-2-4-1
	Submit integration orders	Presence of Functionality	O&P-2-4-2
	Receive acknowledgement	Accuracy of Response Clarity of Information Timeliness of Response	O&P-2-4-3
	Receive error/reject notification	Accuracy of Response Clarity of Information Timeliness of Response	O&P-2-4-4
	Correct error(s)	Clarity of Information Availability of Documentation Accuracy of Document(s)	O&P-2-4-5
	Re-send integration order	Presence of Functionality	O&P-2-4-6
	Receive FOC	Accuracy of Response Clarity of Information Timeliness of Response	O&P-2-4-7
Receive Completion Notice	Receive CN transaction	Accuracy of Response Clarity of Information Timeliness of Response	O&P-2-5-1
	Receive transaction response	Accuracy of Response Clarity of Information Timeliness of Response	O&P-2-5-2
Receive Jeopardy Notification	Receive jeopardy notification transaction	Accuracy of Response Clarity of Information Timeliness of Response	O&P-2-6-1
Check Service Order Status	Create Service Order Status request	Presence of Functionality Accuracy of Document(s) Availability of Documentation	O&P-2-7-1
	Send transaction	Presence of Functionality	O&P-2-7-2
	Receive response	Accuracy of Response Clarity of Information Timeliness of Response	O&P-2-7-3

3.0   O&P-3: EDI/TAG Normal Volume Performance Test

The EDI/TAG Normal Volume Performance Test will evaluate the behavior and performance of both the EDI and TAG interfaces under "normal" YE01 projected transaction load conditions simultaneously. This test cycle will be executed by TTGs capable of submitting large volumes of flow-through pre-ordering (TAG only) and resale and UNE service request test cases in a manner consistent with the forecasted daily usage patterns and transaction mix (including error conditions) for each interface. Patterns of time within the day and patterns of days within the month will be emulated.

The normal volume forecast will be developed across BellSouth's entire 9-state region (not simply Georgia) as described in Appendix C: Volume Analysis. The test will be executed during two 10-hour periods by modeling the expected normal daily usage pattern (e.g., the off-peak nighttime hour loads will be ignored for the test). The majority of the transactions submitted in support of this test cycle are expected to flow through BellSouth's OSS electronically and return an error or a FOC. The following evaluation criteria will be used to address the sub-processes and functions evaluated in test O&P-3.

Sub Process	Function	Evaluation Criteria	Test Cross Reference
Submit Orders in Projected Normal Volumes	Create order transaction(s)	Availability of Interface Timeliness of Response	O&P-3-1-1
	Send order in LSR format	Availability of Interface	O&P-3-1-2
	Receive acknowledgment	Availability of Interface Accuracy of Response Timeliness of Response	O&P-3-1-3
	Receive FOC or error/reject notification	Availability of Interface Accuracy of Response Timeliness of Response	O&P-3-1-4

4.0   O&P-4: EDI/TAG Peak Volume Performance Test

The EDI/TAG Peak Volume Performance Test will evaluate the behavior and performance of both the EDI and TAG interfaces under "peak" YE01 projected transaction load conditions simultaneously. This test cycle will execute selected flow-through pre-ordering (TAG only) and resale and UNE service request test cases, including error conditions.

The peak volume forecast will be developed using the peak hourly load identified for the EDI/TAG Normal Volume Performance Test and replicating those transaction volumes across an 8-hour period. Alternatively, if BellSouth's normal daily usage patterns are relatively flat, a multiple may be applied to the peak hourly load and the result replicated across an 8-hour day. The methodology and calculations are discussed further in Appendix C: Volume Analysis. The following evaluation criteria will be used to address the sub-processes and functions evaluated in test O&P-4.

Sub Process	Function	Evaluation Criteria	Test Cross Reference
Submit Orders in Projected Peak Volumes	Create order transaction(s)	Availability of Interface Timeliness of Response	O&P-4-1-1
	Send order in LSR format	Availability of Interface	O&P-4-1-2
	Receive acknowledgment	Availability of Interface Accuracy of Response Timeliness of Response	O&P-4-1-3
	Receive FOC or error/rejection notification	Availability of Interface Accuracy of Response Timeliness of Response	O&P-4-1-4

5.0   O&P-5: Provisioning Verification Test

The Provisioning Verification Test will evaluate BellSouth's ability to accurately and expeditiously complete the provisioning of service requests placed in both the O&P-1: EDI Functional Test and O&P-2: TAG Functional Test. This analysis will focus on electronically ordered UNEs and involves the physical inspection of BellSouth's provisioning process. Real CLEC provisioning activities will be observed in order to test end-to-end provisioning process on UNE Loop orders. In addition, in order to test the full functionality of BellSouth's provisioning process, orders will be supplemented and canceled, require outside dispatch, and address customer coordination. The following evaluation criteria will be used to address the sub-processes and functions evaluated in test O&P-5.

Sub Process	Function	Evaluation Criteria	Test Cross Reference
BellSouth provisioned service	Receive design documents	Timeliness of Response Accuracy of Document(s) Availability of Document(s) Change Management Notification Structure of Document(s) Distribution of Document(s)	O&P-5-1-1
	Establish provisioning date and time	Process Validation	O&P-5-1-2
	Perform provisioning activities	Provisioning Validation Provisioning Coordination Provisioning Timeliness of Response/Completion Provisioning Systems Integrity	O&P-5-1-3
	Perform testing activities	Provisioning Validation Provisioning Coordination Provisioning Timeliness of Response/Completion Provisioning Systems Integrity	O&P-5-1-4
	Turn up service	Provisioning Validation Provisioning Coordination Provisioning Timeliness of Response/Completion Provisioning Systems Integrity	O&P-5-1-5

6.0 O&P-6: Order Processing Systems Capacity Management Evaluation

The Order Processing Systems Capacity Management Evaluation is a detailed review of the safeguards and procedures in place to plan for and manage projected growth in the use of the cluster of ordering applications. The following evaluation criteria will be used to address the sub-processes and functions evaluated in test O&P-6.

Sub Process	Function	Evaluation Criteria	Test Cross Reference
Order Processing Systems Capacity ManagementEDI/ TAG Capacity Management	Data collection and reporting of business volumes, resource utilization, and performance monitoringEvaluate business volume tracking and forecasting	Adequacy and Completeness of Planning and Forecastingdata collection and reporting	O&P-6-1-1
	Data verification and analysis of business volumes, resource utilization, and performance monitoringEvaluate resource usage tracking and forecasting	Adequacy and Completeness of Usage Monitoringdata verification and analysis	O&P-6-1-2
	Systems and capacity planning.Evaluate performance management process	Adequacy and Completeness of Performance Management Processsystems and capacity planning	O&P-6-1-3
	Evaluate capacity management process	Adequacy and Completeness of Capacity Management	O&P-6-1-4

7.0 O&P-7: O&P Performance Results Comparison

The O&P Performance Results Comparison is a comparative analysis of O&P performance results collected by the test through test management tools and those collected by BellSouth's performance measurements system. The source results collected from O&P-1: EDI Functional Test, O&P-2: TAG Functional Test, O&P-3: EDI/TAG Normal Volume Performance Test, and O&P-4: EDI/TAG Peak Volume Performance Test will be compared to BellSouth's performance measurement systems, variances and trends will be identified, and disparities will be analyzed for significance. The following evaluation criteria will be used to address the sub-processes and functions evaluated in test O&P-7.

Sub Process	Function	Evaluation Criteria	Test Cross Reference
Percent Rejected Service Requests	Mechanized	Availability of Interface Accuracy of Response Timeliness of Response	O&P-7-1-1
Reject Interval	Mechanized	Availability of Interface Accuracy of Response Timeliness of Response	O&P-7-2-1
Firm Order Confirmation Timeliness	Mechanized	Availability of Interface Accuracy of Response Timeliness of Response	O&P-7-3-1
Percentage of Subsequent Reports	UNE Designed	Availability of Interface Accuracy of Response Timeliness of Response	O&P-7-4-1
	UNE Non-Designed	Availability of Interface Accuracy of Response Timeliness of Response	O&P-7-4-2
Average Completion Interval	UNE Dispatch	Availability of Interface Accuracy of Response Timeliness of Response	O&P-7-5-1
	UNE Non-Dispatch	Availability of Interface Accuracy of Response Timeliness of Response	O&P-7-5-2
Order Completion Interval Distribution	UNE Dispatch	Availability of Interface Accuracy of Response Timeliness of Response	O&P-7-6-1
	UNE Non-Dispatch	Availability of Interface Accuracy of Response Timeliness of Response	O&P-7-6-2
Held Order Interval Distribution and Mean Interval	UNE Dispatch	Availability of Interface Accuracy of Response Timeliness of Response	O&P-7-7-1
	UNE Non-Dispatch	Availability of Interface Accuracy of Response Timeliness of Response	O&P-7-7-2

Sub Process	Function	Evaluation Criteria	Test Cross Reference
Average Jeopardy Notice Interval	UNE Dispatch	Availability of Interface Accuracy of Response Timeliness of Response	O&P-7-8-1
	UNE Non-Dispatch	Availability of Interface Accuracy of Response Timeliness of Response	O&P-7-8-2
Percentage of Orders Given Jeopardy Notices	UNE Dispatch	Availability of Interface Accuracy of Response Timeliness of Response	O&P-7-9-1
	UNE Non-Dispatch	Availability of Interface Accuracy of Response Timeliness of Response	O&P-7-9-2
Percent Provisioning Troubles within 30 Days	UNE Dispatch	Availability of Interface Accuracy of Response Timeliness of Response	O&P-7-10-1
	UNE Non-Dispatch	Availability of Interface Accuracy of Response Timeliness of Response	O&P-7-10-2
Percent Service Order Accuracy	UNE Dispatch	Availability of Interface Accuracy of Response Timeliness of Response	O&P-7-11-1
	UNE Non-Dispatch	Availability of Interface Accuracy of Response Timeliness of Response	O&P-7-11-2
Average Completion Notice Interval	UNE Dispatch	Availability of Interface Accuracy of Response Timeliness of Response	O&P-7-12-1
	UNE Non-Dispatch	Availability of Interface Accuracy of Response Timeliness of Response	O&P-7-12-2

8.0   O&P-8: EDI Documentation Evaluation

The EDI Documentation Evaluation is an analysis of the BellSouth provided documentation used by CLECs to interface and interact with the EDI interface for ordering and provisioning activities.   This evaluation is intended to review the availability, accuracy and completeness of BellSouth's ordering and provisioning documentation using a variety of operational analysis techniques. This test will receive as input from the O&P-1: EDI Functional Test an exceptions report due to documentation which addresses whether system functionality matches that described in the business rules documentation. The following evaluation criteria (will be used to address the sub-processes and functions evaluated in test O&P-8.

Sub Process	Function	Evaluation Criteria	Test Cross Reference
O&P Documentation	LEO Implementation Guides (Volumes 1-4)	Availability of Document(s) Accuracy of Document(s) Structure of Document(s) Distribution of Document(s) Clarity of Information Change Management Notification Process	O&P-8-1-1
	PC-EDI Training Document	Availability of Document(s) Accuracy of Document(s) Structure of Document(s) Distribution of Document(s) Clarity of Information Change Management Notification Process	O&P-8-1-2
	Carrier Notifications off the BellSouth website	Availability of Document(s) Accuracy of Document(s) Structure of Document(s) Distribution of Document(s) Clarity of Information Change Management Notification Process	O&P-8-1-3
	Resale CLEC Activation Requirements	Availability of Document(s) Accuracy of Document(s) Structure of Document(s) Distribution of Document(s) Clarity of Information Change Management Notification Process	O&P-8-1-4

Sub Process	Function	Evaluation Criteria	Test Cross Reference
	Local Number Portability Ordering Guide	Availability of Document(s) Accuracy of Document(s) Structure of Document(s) Distribution of Document(s) Clarity of Information Change Management Notification Process	O&P-8-1-5

9.0 O&P-9: TAG Documentation Evaluation

The TAG Documentation Evaluation is an analysis of the BellSouth provided documentation used by CLECs to interface and interact with the TAG interface for ordering and provisioning activities. This evaluation is intended to review the availability, accuracy and completeness of BellSouth's ordering and provisioning documentation using a variety of operational analysis techniques. This test will receive as input from the O&P-2: TAG Functional Test an exceptions report due to documentation which addresses whether system functionality matches that described in the business rules documentation. The following evaluation criteria will be used to address the sub-processes and functions evaluated in test O&P-9.

Sub Process	Function	Evaluation Criteria	Test Cross Reference
O&P Documentation	LEO Implementation Guides (Volumes 1-4)	Availability of Document(s) Accuracy of Document(s) Structure of Document(s) Distribution of Document(s) Clarity of Information Change Management Notification Process	O&P-9-1-1
	TAG Technical and Programmer Reference Guide(s)	Availability of Document(s) Accuracy of Document(s) Structure of Document(s) Distribution of Document(s) Clarity of Information Change Management Notification Process	O&P-9-1-2
	Carrier Notifications off the BellSouth website	Availability of Document(s) Accuracy of Document(s) Structure of Document(s) Distribution of Document(s) Clarity of Information Change Management Notification Process	O&P-9-1-3
	Resale CLEC Activation Requirements	Availability of Document(s) Accuracy of Document(s) Structure of Document(s) Distribution of Document(s) Clarity of Information Change Management Notification Process	O&P-9-1-4

Sub Process	Function	Evaluation Criteria	Test Cross Reference
	Local Number Portability Ordering Guide	Availability of Document(s) Accuracy of Document(s) Structure of Document(s) Distribution of Document(s) Clarity of Information Change Management Notification Process	O&P-9-1-5

10.0   O&P-10: EDI/TAG Production Volume Performance Test

The EDI/TAG Peak Volume Performance Test will evaluate the behavior and performance of both the EDI and TAG interfaces under current capacities of the production system. This test cycle will execute selected flow-through pre-ordering (TAG only) and resale and UNE service request test cases, excluding error conditions.

The test will be executed during an 8-hour period. The following evaluation criteria will be used to address the sub-processes and functions evaluated in test O&P-10.

Sub Process	Function	Evaluation Criteria	Test Cross Reference
Submit Orders in Production Volumes	Create order transaction(s)	Availability of Interface Timeliness of Response	O&P-10-1-1
	Send order in LSR format	Availability of Interface	O&P-10-1-2
	Receive acknowledgment	Availability of Interface Accuracy of Response Timeliness of Response	O&P-10-1-3
	Receive FOC or error/rejection notification	Availability of Interface Accuracy of Response Timeliness of Response	O&P-10-1-4